

Science: Power or Truth

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In recent years, there has been an ongoing, sometimes rancorous debate regarding the question: “Who should do research related to Deaf people?” At the heart of this debate seem to be additional questions related to values. Can “truth” be measured empirically following scientific methods? Can “truth” be interpreted to fit the currently accepted belief system? Can “truth” be completely divorced from the context of the currently accepted belief system? And what has the highest priority: Is it the scientific assumption that “truth” can be measured empirically or the political (power) assumption that “truth” is a social construction and best kept in the hands of the group(s) most directly affected?

The issue of accepted social beliefs about deafness is extremely important. Prior to the Milan Congress in 1880, sign language was considered a viable method of communication and teaching. After the London Times reported to the world that the oral method of teaching had been shown to be superior and almost unanimously preferred on the basis of the demonstrations at these international meetings, the advocates of sign language were virtually swept away (Van Cleve and Crouch, 1989). It made no difference that these demonstrations were not conducted according to strict scientific protocol. The superiority of the oral method was perceived as real and the consequences for deaf people were also real.

As a result, the taken-for-granted assumptions in education and research for the next eighty years or so were that sign language was not really a language and was therefore inappropriate in an educational setting; that deafness was a condition to be ameliorated; and that aim of research should be to look within the deaf person for a solution to the problem. People sharing these beliefs controlled the agenda—and these people were primarily hearing members of the majority culture. Thus, the questions being asked were, unsurprisingly, ones from an outsider (hearing) perspective.

An example was Alexander Graham Bell’s (1883) research question, “How can we prevent deaf people from propagating a deaf race?” Bell was responding to the then-popular notion of eugenics and applying these ideas to the deaf population. Eventually, these kinds of questions and assumptions gave rise to a “body of knowledge” which lead to a psychology of deafness in which personality traits of Deaf people were described as being deviant from that of majority (hearing) cultural members (see Lane, 1988). The consequences of such thinking included the denial to Deaf people entrance into schools of higher education and the use of research perspectives and questions which differed from those used for the majority culture.

About thirty-five years ago, around the time of the civil rights movement of African-Americans, things began to change. Dr. William Stokoe, working at Gallaudet University, demonstrated that American Sign Language (ASL) indeed possessed the linguistic characteristics of a separate language. Somewhat later, civil rights were extended to “handicapped” people, including the Deaf, through Section 504 of the Rehabilitation Act, and, even later, the Deaf President Now protest was a success at Gallaudet University. With increasing linguistic, legal, educational rights and opportunities, Deaf people began to formulate research questions from an insider’s perspective, often with some basis in personal experience. However, the number of research projects and labs headed by Deaf people remain small, and most of these researchers have focused on areas of language and

culture. Many research projects have included teams of both Deaf and non-Deaf researchers (including Stokoe's work), which allows more than one perspective and more than one way to ask questions or interpret results.

The history of science is full of examples of assumptions explicitly made by people with power which either facilitated or hindered the path of science. Extreme examples include the opposition of the Catholic Church to Galileo's research and the support of the Soviet Union for the work of Lysenko. In both cases, the preconceived ideas of powerful people were placed ahead of the objectives of scientific research (Stevenson and Byerly, 1995). In this paper we are concerned with preconceived notions about deafness. It doesn't really matter whether we are discussing Stalin or the Pope, A.G. Bell or a Deaf political activist concerned about who has the "right" to do research in deafness or with deaf people. Preconceived notions about "appropriate" outcomes should not have a place in science.

It could be argued that people doing scientific research all have preconceived ideas of one sort or another. We do all exist in a particular culture and at a particular time. These factors have implicitly shaped our way of thinking. Growing up as a member of an oppressed group or the member of an upper class can easily influence what questions are being asked, how the research is conducted and how the results are interpreted. As we noted earlier, diverse collaboration is a way to address this potential problem. Being aware of one's own preconceived notions is important for all researchers, but is often only seriously addressed in the social sciences (Spradley & McCurdy, 1972).

Instead of reviewing the political qualifications of scientists, attention should be given to the research methods and findings of everyone working in this area. The fundamental assumption of science is that "truth" can be empirically measured, and therefore, empirical findings are not only verified but verifiable. It is true that methodologies and tests may be "cultural artifacts" in themselves and thus subject to bias (Lane, Hoffmeister, and Bahan, 1996). But, if a researcher makes an error in methodology, it is the responsibility of the scientific community to find that mistake and correct it. Scientific research is about correcting hypotheses rather than political correctness. We have seen problems caused by a political agendas or institutionalized prejudices in deaf research and elsewhere in science. Research in the field of Deaf culture and Deaf education needs to be done by people who will adhere to the principles of research rather than adhering to a particular ideological "truth."

References

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